

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re continuation

Application of

Applicant: BHUSRI

:

Continuation of prior

Appln. Ser. No.: 09/041,457

: Group Art Unit:

2645

Continuation Filed:

October 15, 2001

: Examiner:

N. J. Putt

For:

SERVICE AND INFORMATION MANAGEMENT SYSTEM FOR A
TELECOMMUNICATIONS NETWORK

PRELIMINARY AMENDMENT

Commissioner for Patents
Washington, D.C. 20231

Prior to examination of a Continuation Application filed concurrently herewith, please
amend the above-designated application, as follows:

IN THE SPECIFICATION:

Page 1, line 3 after the title and before line 4, insert the following paragraph:

--This application is a Continuation of Serial Number 09/041,439, filed March 12, 1998,
allowed July 30, 2001, which is a divisional of application Ser. No. 08/837,830, filed April 22,
1997, issued March 2, 1999, now USP 5,878,113 assigned to the same assignee as that of the
present invention.--

IN THE CLAIMS:

Please add the following NEW Claims:

45. (New) A method for determining a failed call, in a telephone communications network, comprising the steps of:

- a) receiving at an originating switch node a request message from a local exchange carrier serving a calling party;
- b) validating the request message at the originating switch node and appending appropriate transaction information to form an information packet that, includes an error code field noting whether an error was detected in validating the requests message;
- c) sending the information packet to a network operations element to request message routing;
- d) receiving instructions from the network operations element for routing the requests message and sending the request message to a terminating switch node, via a signal transfer point using the received routing instructions;
- e) sending a release message to the local exchange carrier when the originating switch does not receive any one of an address complete message, an answer message and a release message from the terminating switch;
- f) appending the information packet to the release message, including an entry in the error code field of the information packet indicating that a time-out error occurred and forwarding the information packet to the network operations element; and
- g) activating a fault management application that proactively correlates message copies received to audit message traces for each call and to check error codes for determining that a call has failed

46. (New) The method of Claim 45 further comprising:

h) checking for an incomplete message trace and the entry in the error code field to determine if a call failed before replicating the Request Message and sending the call.

47. (New) The method of Claim 45 further comprising:

i) receiving messages at the network operations element from all network elements that provided a path through the network for the call.

48. (New) The method of Claim 45 further comprising:

j) storing information packets from all networks elements that provided a path for the call, the packets providing a complete message trace and data about each call in which an error was detected, the packets being accessible to the fault management application for determining whether and how a call failed.

49. (New) The method of Claim 45 further comprising:

k) determining whether a network element has a corrupted routing table if the request message is sent to the wrong terminating switch node.

50. (New) A method of replicating a failed call made in a telephone communication network, comprising the steps of:

a) forwarding an information packet containing an error code to a network operations element upon detecting a failed call in an originating switch node;

- b) formulating and launching a Request message from the network operations element through a switching network to the originating switch node to replicate the failed call;
- c) sending a second information packet to the network operations element from the originating switch node requesting processing and routing instructions for the replicated call;
- d) providing a response message to the originating switch node indicating the replicated call is a test call requiring sent and receive messages to be forwarded to the network operations element and providing instructions to process and route the replicated call;
- e) sending a request message to a terminating switch node, via network elements, and embedding within the message a signal indicating that the call is a test call;
- f) sending a network element information packet to the network operations element from each network element traversed by the call, the network element information packet containing a copy of each message sent or received by the traversed network element;
- g) determining from the network element information packet from each network element providing a path for the call an indication whether any one of an address complete message, an answer message and a release message was received by the originating switch node;
- h) examining the network element information packet received from the originating switch node and the terminating switch node receiving a misdelivered one of the address complete message, an answer message and a release message to determine the network element causing a routing error; and
- i) determining from the misdelivered message the identification of the terminating switch node which should have received the message if there was no routing error

51. (New) The method of claim 50 further comprising;

j) modifying a routing table of the network element causing the failed call to correct the routing error;

52. (New) The method of claim 50, further comprising:

k) receiving at the network operations element a full complement of messages received and transported by each element network traversed by the test call;

53. (New) The method of claim 50, further comprising:

l) assigning different test call prefixes for different types of test calls.

54. (New) The method of claim 50, further comprising:

m). verifying the transmission performance of a path between switch nodes traversed by the test call.

55. (New) A method for providing address translation for all calls in a telephone network, including those without a physical destination, comprising:

a) receiving a request message at an originating switch from a local exchange carrier, the request message containing a call address;

b) generating at the originating switch node an information packet that contains the received request message which contains called number which may be the address of physical location or a number requiring translation to a physical address for transmission to a network operations element;

c) storing the information packet in a database accessible by the network operations element;

d) translating the call address to a destination address having a physical location using at least one of an automatic number identification table and a dialed number table if the call does not have a physical address;

e) providing the originating switch node instructions for routing the call to the destination address via the network elements;

f) generating at the network elements traversed by the call and transmitting to the originating switch node a network element information packet descriptive of the call processing at the network element; and

g) forwarding to the network operations element for storage in the database the network element information packets received from the network elements traversed by the call.

56. (New) The method of claim 55 further comprising:

h) employing the dialed number table for processing and routing the call.

57. (New) The method of claim 55 further comprising:

i) Employing a network map table to provide the originating switch node with information regarding servicing signal transfer points.

58. (New) The method of claim 55 further comprising:

j) sending all call received by the originating switch node to the network operations element for translation.

59. (New) The method of claim 55 further comprising:

k) translating the call to any destination address provisioned in the dialed number table

60. (New) The method of Claim 55 further comprising:

l) requesting another network element to provide instructions to a designated switch

61. (New) The method of Claim 55 further comprising:

m) provisioning the network operations element and the service control points for call routing at the option of the network operations element.

REMARKS

This Continuation Application incorporates by reference parent Application Serial Number 09/041,439, filed March 12, 1998, assigned to the same assignee as that of the present invention, which stands allowed but on which the issue fee has not been paid. Claims 45-61 are new Claims in the Continuation Application and are based upon the disclosure of the parent application Serial Number 09/041,439 filed March 12, 1998.

Applicant requests transfer of a copy of the file of 09/041,439, filed March 12, 1998 containing the specification, drawings to the present Application, as authorized by MPEP 206 (c).

Entry of the Preliminary Amendment for purposes of examination of the Continuation Application is requested.


AUTHORIZATION:

The Commissioner is hereby authorized to charge any additional fees which may be required for the timely consideration of this amendment under 37 C.F.R. §§ 1.16 and 1.17, or credit any overpayment to Deposit Account No. 13-4503, Order No. 2455-4074US5.

Respectfully submitted,

MORGAN & FINNEGAN, L.L.P.

Dated: October 15, 2001

By: 
Joseph C. Redmond, Jr.
Registration No. 18,753
202-857-7887 – Telephone
202-857-7929 – Facsimile

CORRESPONDENCE ADDRESS:

Morgan & Finnegan L.L.P.
1775 Eye Street, N.W., Suite 400
Washington, D.C. 20006

2001 OCT 15 PM 4:00

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ATTN: OFFICIAL DRAFTSMAN

Commissioner for Patents

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SUBMISSION OF FORMAL DRAWINGS

Dear Sir:

Attached hereto are fifteen (15) sheets of formal drawings (Fig 1-15) for the above-identified continuation application.

Applicant believes that no fee is due with this submission of formal drawings. However, in the event that a fee is found to be due, the Commissioner is authorized to charge such fee(s) to Deposit Account No. 13-4503, Order No. 2455-4074US5. A DUPLICATE COPY OF THIS PAPER IS ATTACHED HERETO.

Respectfully submitted,

MORGAN & FINNEGAN, L.L.P.

Date: October 15, 2001

By: Joseph C. Redmond, Jr.

Joseph C. Redmond, Jr..

Registration No.: 18.753

(202) 857-7887 Telephone

(202) 857-7929 Facsimile

CORRESPONDENCE ADDRESS:

Morgan & Finnegan, L.L.P.

345 Park Avenue

New York, New York 10154